Informational: Presentation of Highway Cost Allocation Lookback Study

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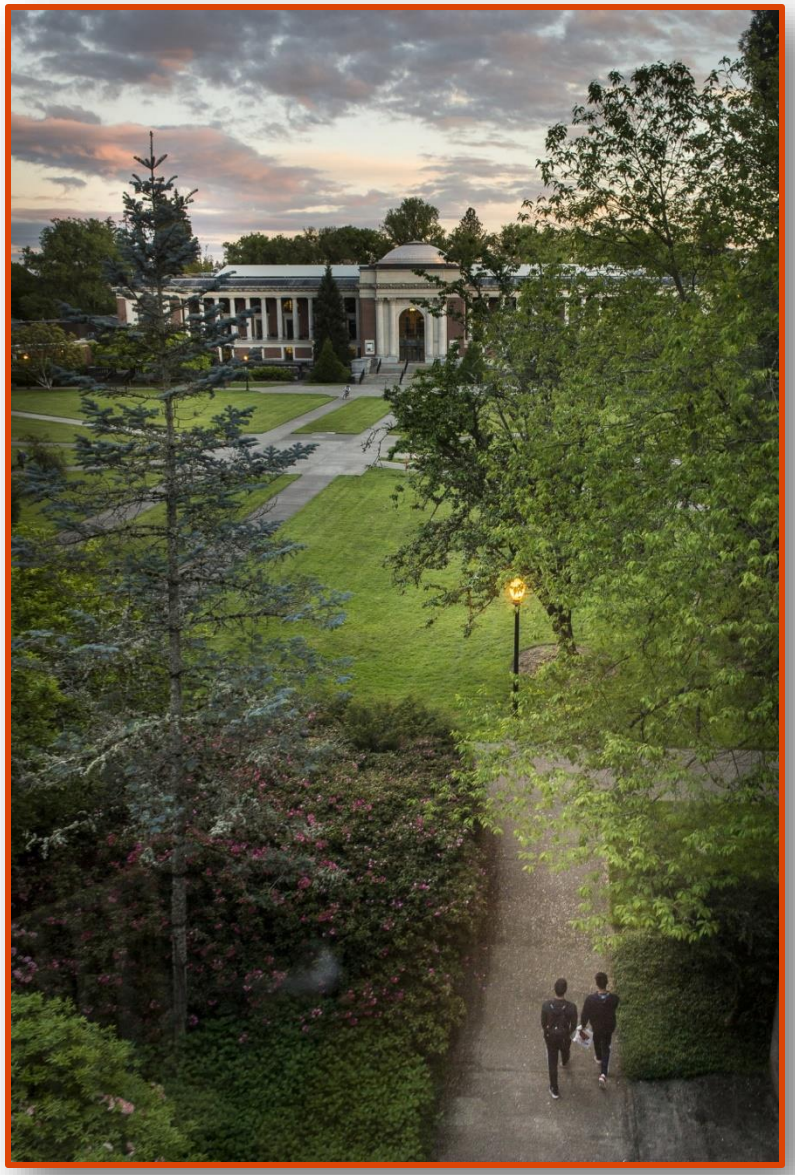

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Project Objectives

In the Scope of Work (SOW), the Office of Economic Analysis (OEA) tasked OSU with fulfilling two objectives:

- Objective 1
  - Verify that the HCAS models for the 2017-2019, 2019-2021, and 2021-2023 biennia can be executed and produce the same output using projected data.
- Objective 2
  - Examine the differences in the scaled equity ratios and cost responsibility shares across vehicle classes when using actual revenue and cost data versus projected data.

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HCAS Review Methodology

TASK	DATA TYPE	WHY?	OBJECTIVE
1. Verify the inputs to the HCAS Model	Projected	Verified that the data that ODOT provided to ECONorthwest was the same that OSU received	1
2. Verify the outputs from the HCAS Model	Projected	Verified that OSU could duplicate the results that ECONorthwest generated with the provided HCAS models	1
3. Create new HCAS model scenarios	Actual	Verified that OSU could run the HCAS models using actual data	2
4. Generate outputs using the HCAS Model	Actual	Generated outputs for each biennium with the HCAS models using actual (i.e., not projected) data	2
5. Analyze and interpret results	Projected and Actual	Analyzed and compared the accuracy of the HCAS models using projected and actual data	2

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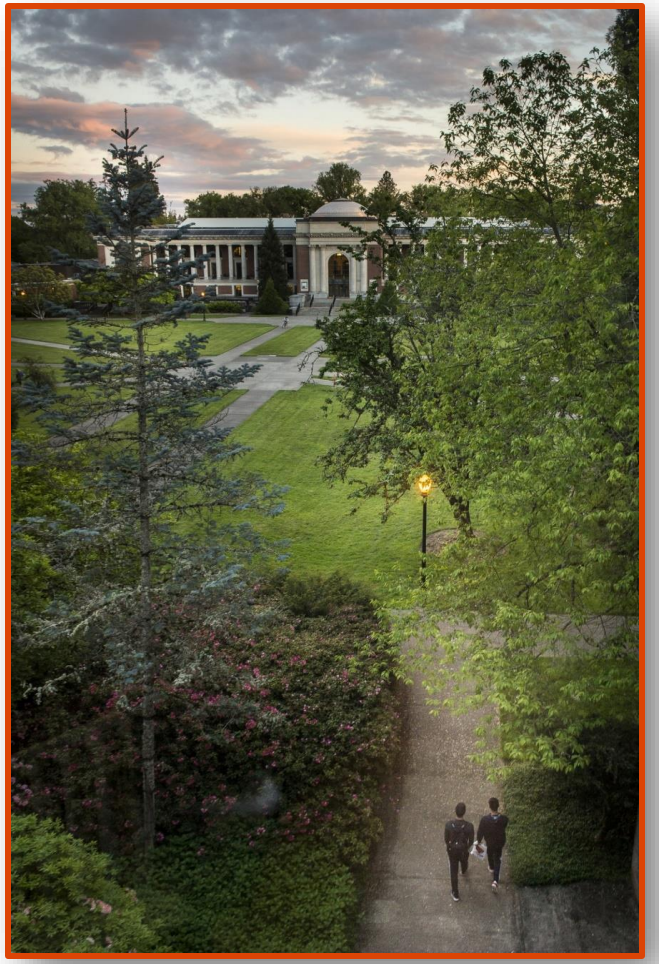
2017-2019 Biennium Results

Share of Cost



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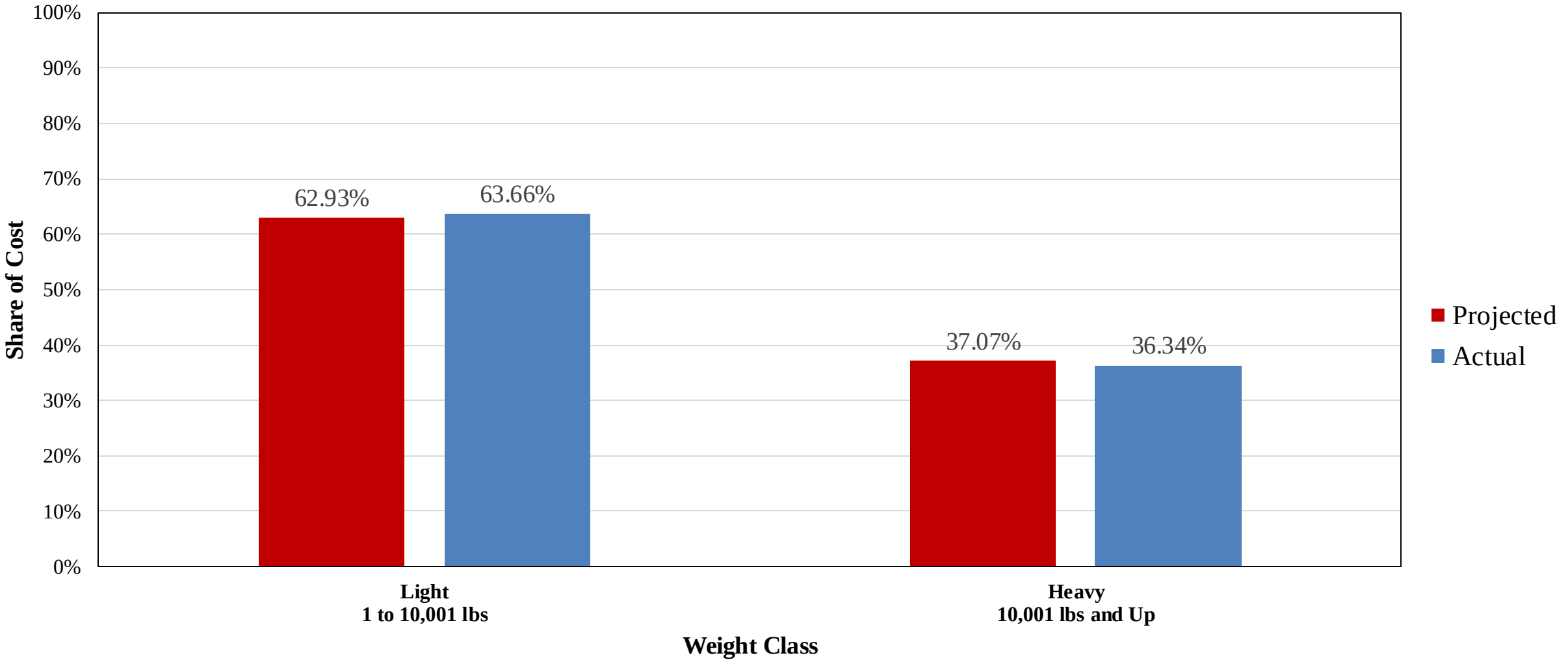
Share of Cost (All-Fee) 2017-2019 Biennium



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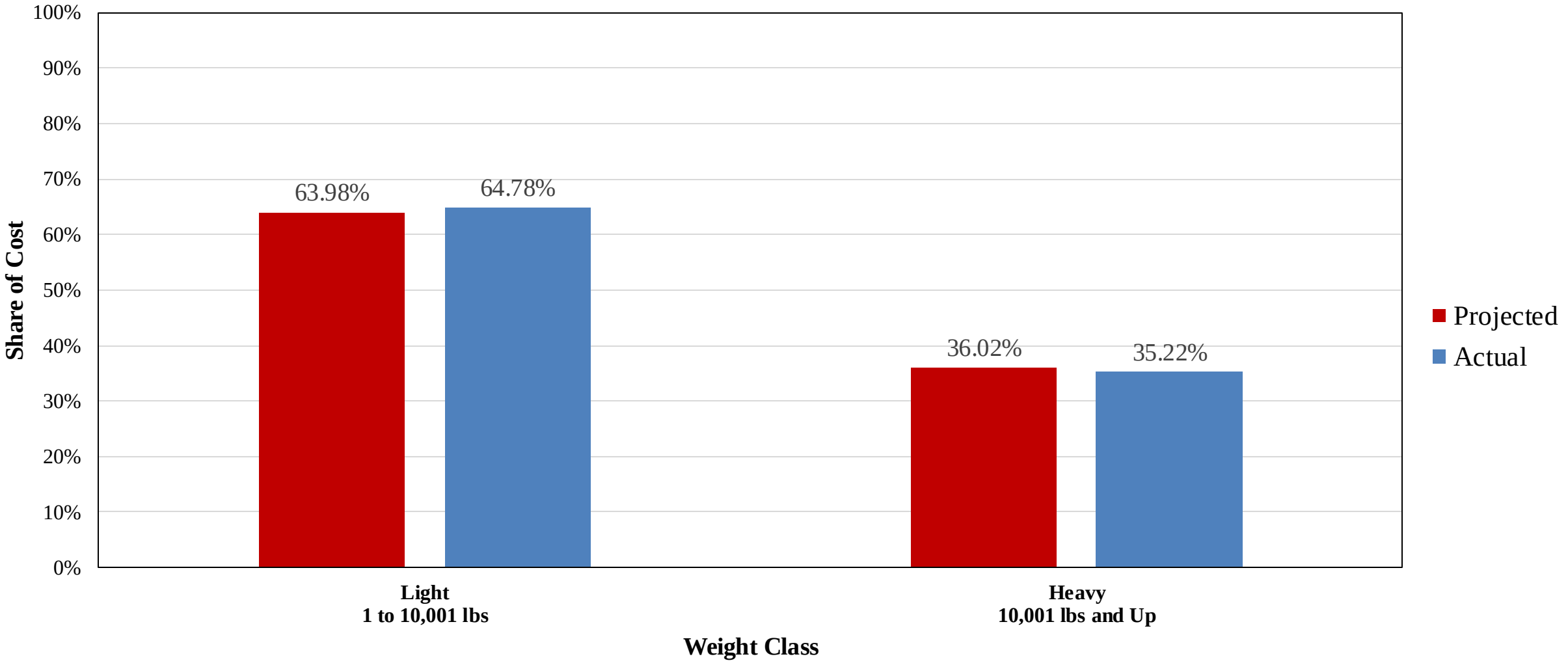
Share of Cost (Full-Fee) 2017-2019 Biennium



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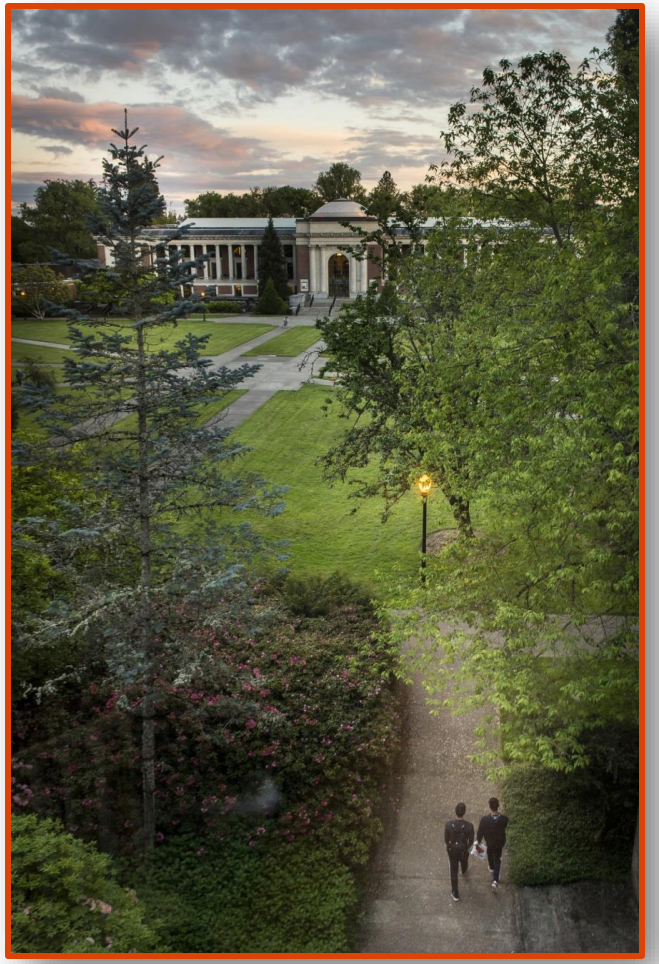
2019-2021 Biennium Results

Share of Cost



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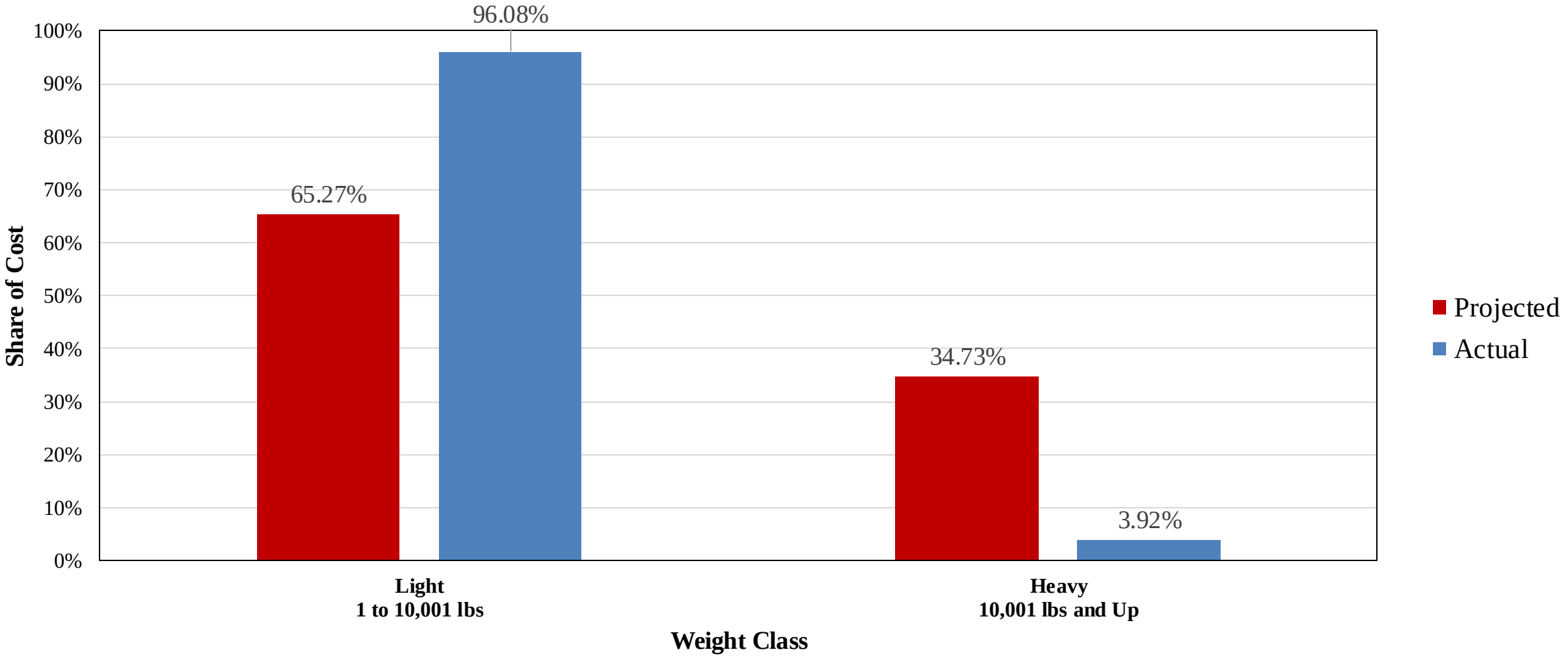
Share of Cost (All-Fee) 2019-2021 Biennium



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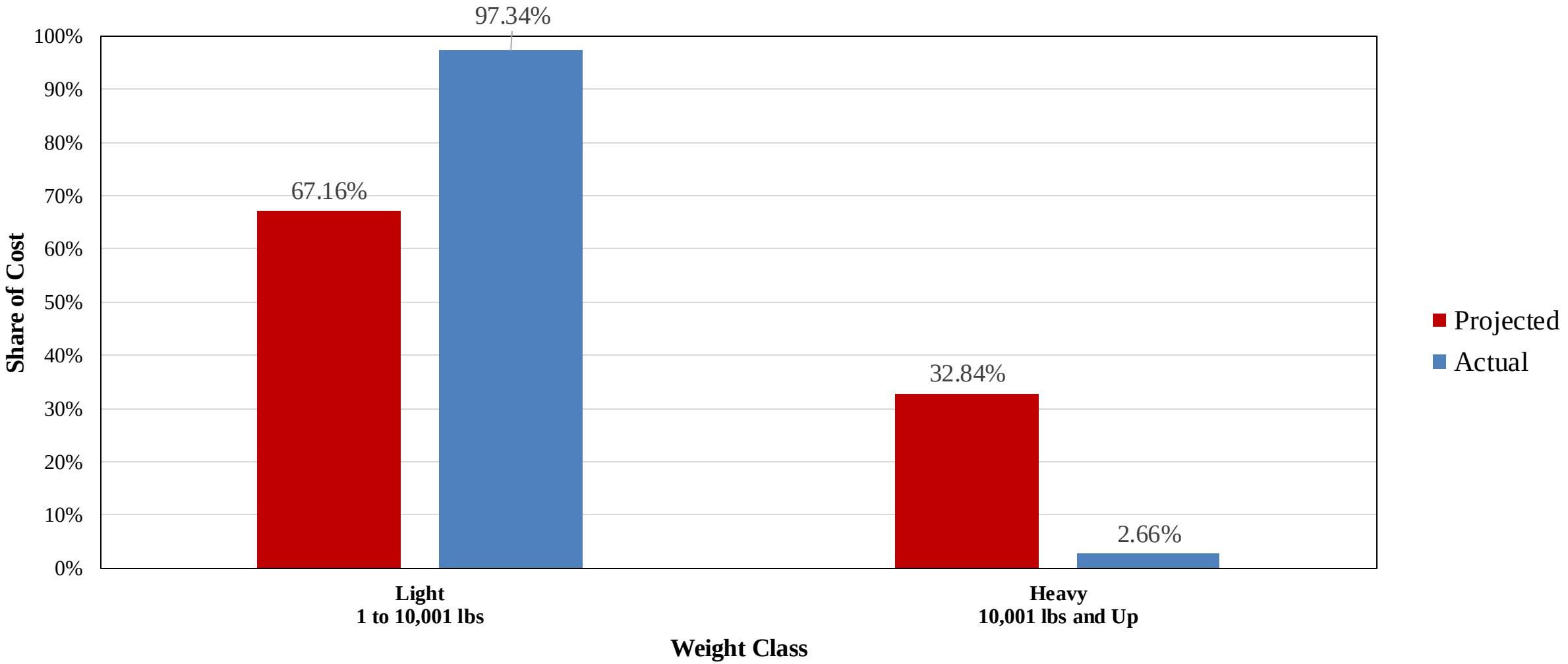
Share of Cost (Full-Fee) 2019-2021 Biennium



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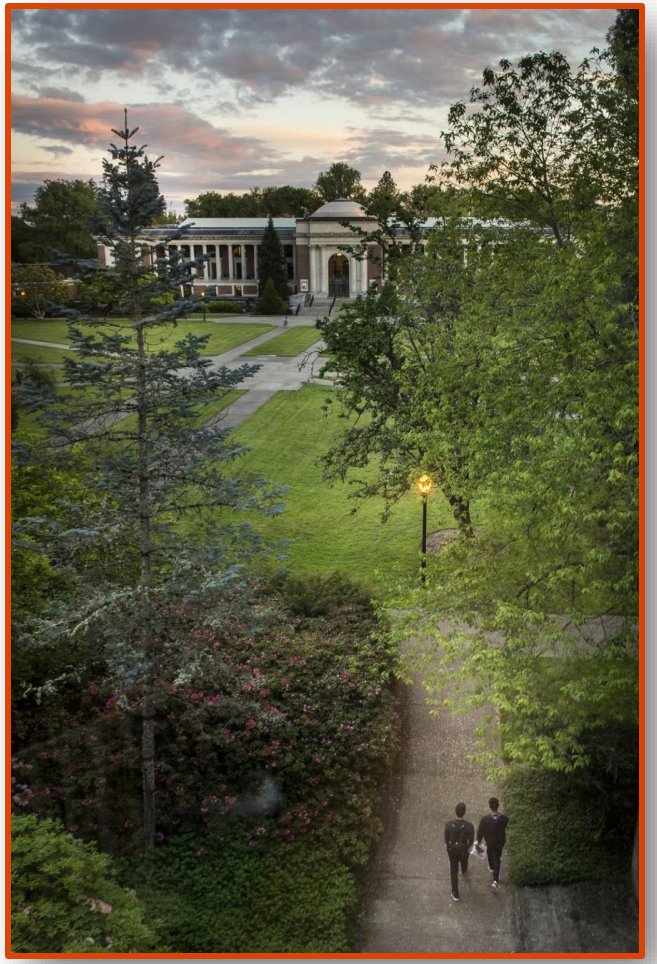
2021-2023 Biennium Results

Share of Cost



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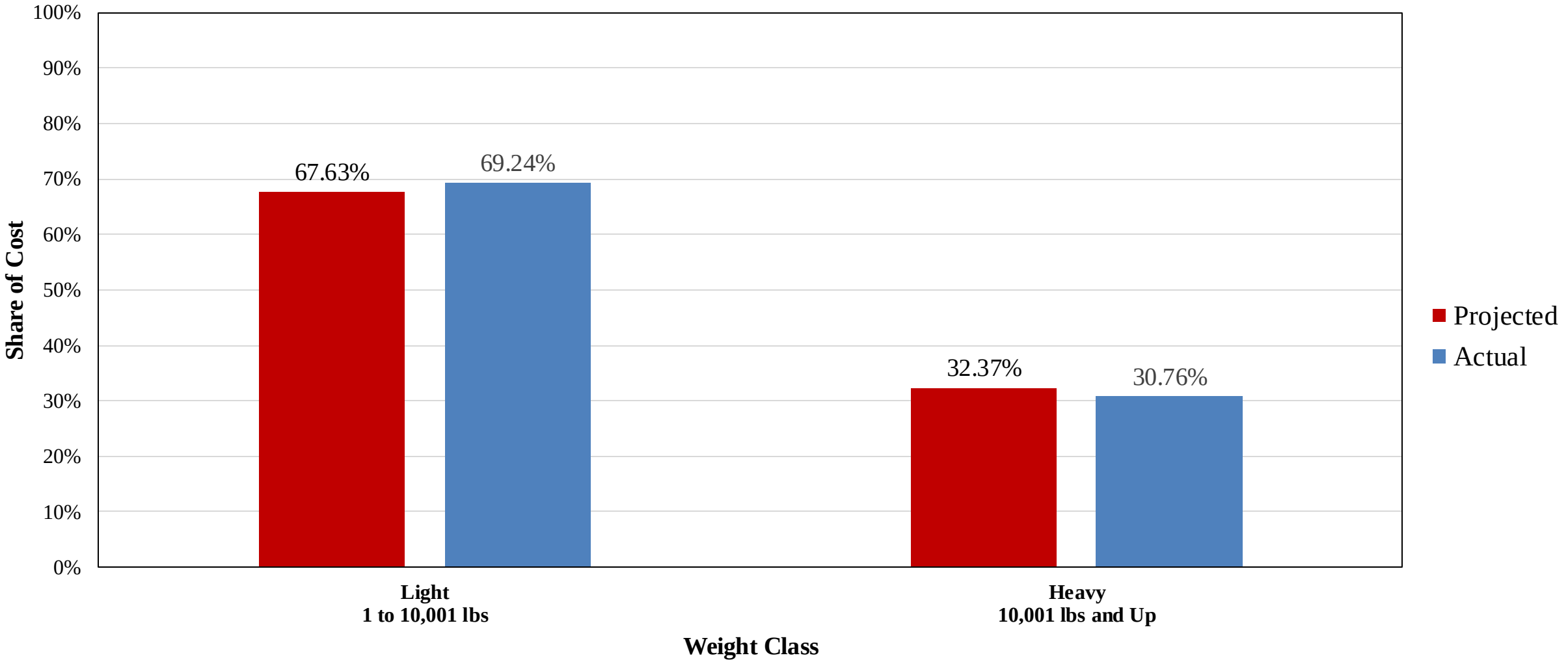
Share of Cost (All-Fee) 2021-2023 Biennium



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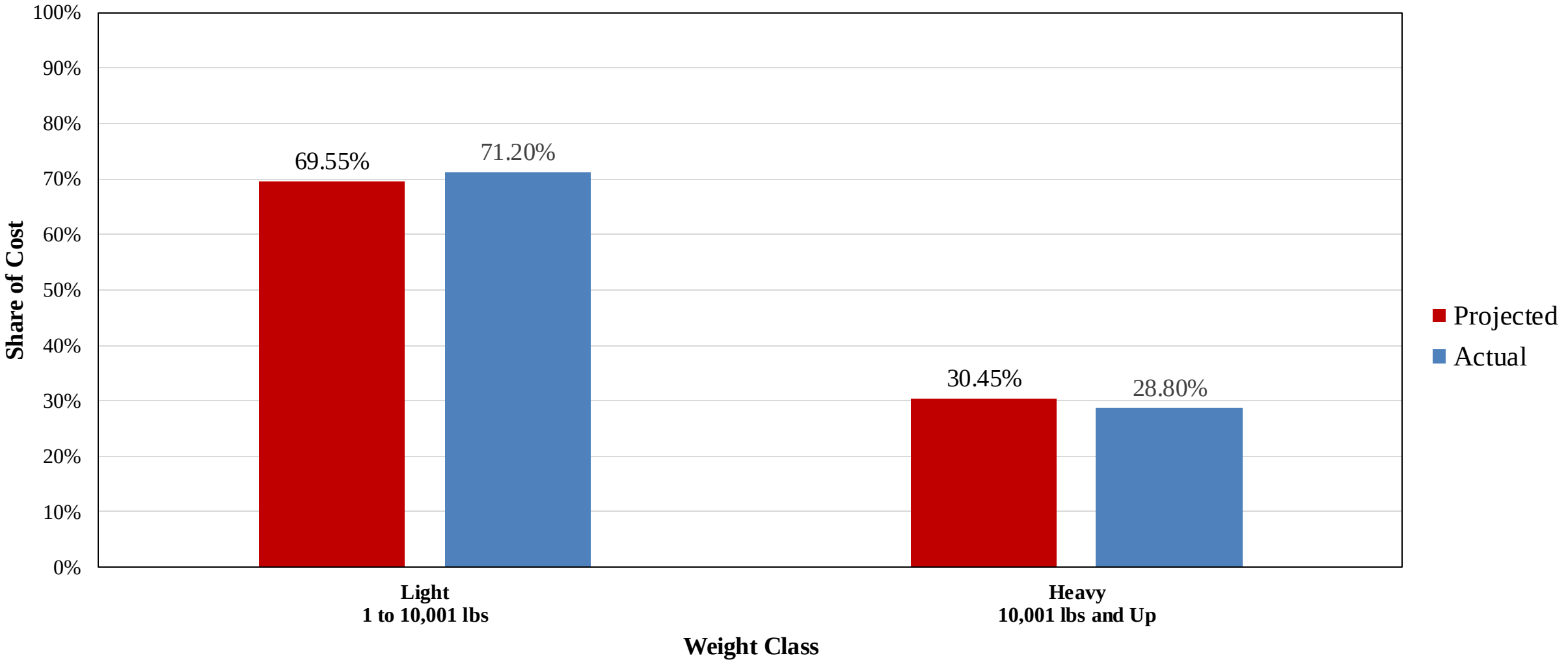
Share of Cost (Full-Fee) 2021-2023 Biennium



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Recommendations

- After completing the evaluation of the HCAS models for the 2017-2019, 2019-2021, and 2021-2023 biennia, the OSU research team recommends the following:
  1. Perform further research on the limitations of the HCAS model,
  2. Streamline the coding of project WorkTypes, and
  3. Improve the documentation on project WorkType and Bridge Type Coding process.

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